

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 57-072272

(43)Date of publication of application : 06.05.1982

51)Int.Cl.

H01M 6/18
H01M 4/06
// H01M 4/50

21)Application number : 55-148364

(71)Applicant : TOSHIBA CORP

22)Date of filing : 24.10.1980

(72)Inventor : KANDA MOTOI
YAMADA SHUJI

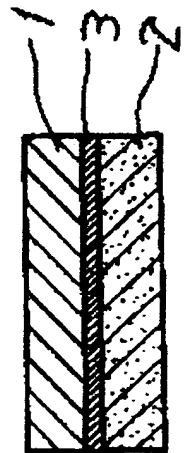
54) SOLID LITHIUM BATTERY AND ITS MANUFACTURE

57)Abstract:

PURPOSE: To obtain a battery which has a flat discharge characteristic and small voltage decrease at high voltage by constituting the battery by use of a negative lithium electrode, a positive electrode made of a mixture consisting of manganese dioxide and lithium iodide, and an electrolyte made of a thin lithium-iodide layer produced between the electrodes.

CONSTITUTION: A negative electrode 1 made of lithium metal or its alloy, a positive pellet 2 prepared from a mixture consisting of manganese dioxide and lithium iodide, and a solid electrolyte 3 made of a thin lithium iodide layer produced in the interface between these electrodes joined together are used in constituting a solid battery. For instance, a current collecting body is placed in a metal mold, a mixture consisting of manganese dioxide and lithium iodide is placed on the current collecting body, and the mixture is lightly pressed. A negative lithium-plate electrode and another current collecting body are placed over the former mixture,

and a pressure of around 3t/cm² is applied on the current collecting body. After that, the battery is wired with a lead wire, and the entire battery is covered with paraffin, thus a solid battery is obtained. Consequently, a battery which has a flat discharge characteristic and small voltage decrease at high voltage can be obtained by improving the diffusion of lithium ions contained in the positive electrode.



LEGAL STATUS

Date of request for examination]

Date of sending the examiner's decision of rejection]

(ind of final disposal of application other than the

examiner's decision of rejection or application
converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of
rejection]

[Date of requesting appeal against examiner's decision
of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office